

Procedures and Guidelines

DIRECTIVE NO. 900-PG-8730.3.1
EFFECTIVE DATE: April 21, 1999
EXPIRATION DATE: April 21, 2004

APPROVED BY Signature: Original Signed By
NAME: Vincent V. Salomonson
TITLE: Director of Earth Sciences

Responsible Office: 900 / Earth Sciences Directorate

Title: PROJECT PROPOSAL, DEVELOPMENT and OPERATION

P1. PURPOSE

This procedure gives an overall view of the various activities involved from the early conceptualization of an instrument and/or a data system based project, through its proposal and funding activities, design, development and later its operation.

It refers to other PG procedures that deal more specifically with the individual activities, responsibilities and outputs.

The procedure is written to be in harmony with applicable GPG procedures and, combined with these, to be compliant with and cover the requirements of the ISO 9001 standard.

P2. REFERENCES

GPG-8730.3 and 902-PG-8730.3.1
GPG-1310.1 and 900-PG-1310.1.1
GPG-8700.1, .2, .3, .4 and 900-PG-8700.1, .2
GPG-8072.1 and 900-PG-8072.1.1
GPG-1410.1
GPG-1440.7
GPG-4520.2
GPG-5310.4
GPG-5330.1, .2
GPG-5340.3
ISO 9001, Elements 4.3, 4.4, 4.5, 4.8, 4.9, 4.10, 4.11, 4.12, 4.13, 4.15 and 4.16

P3. SCOPE

This procedure applies to instrument and/or data system based projects undertaken by the Code 900 Directorate. Smaller projects will often omit specific steps that are not required because of the project's size, risk and/or complexity. The Director of Code 900 or his/her Laboratory Chiefs approves this tailoring. This authorization, along with its justification, is documented and a record of this kept with the project file.

This procedure also applies to all civil servants of the Code 900 Directorate who are involved with the project. It also applies to all on-site contractors similarly involved.

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P4. DEFINITIONS

PI	Principal Investigator:	Person responsible for the project.
PM	Product Manager:	Person, subordinate to the PI, with major responsibilities within the project.

P5. AUTHORITIES AND RESPONSIBILITIES

As this PG is an overview procedure that only makes direct references to other procedures, the authorities and responsibilities will be as described in these referenced procedures.

P6. IMPLEMENTATION

STEP#	RESPONSIBILITY	PROCESS STEPS
6.1	per 900-PG-1310.1.1	The research is conceptualized. Measurements and instruments are defined.
6.2	per 900-PG-1310.1.1	A proposal draft for the science research is prepared. A team is selected and requirements and objectives defined. Cost and other resources are estimated and a proposal generated, reviewed and submitted. Following review and approval, the proposal is submitted to the funding body for approval and funding.
6.3	per 900-PG-1310.1.1	In preparation for the later instrument and/or data systems design efforts, an instrument/math model is designed and developed.
6.4	per 900-PG-8700.1.1	The instrument is designed and PDR reviewed. An Engineering model is built and tested and followed by a CDR review. A flight model is then built, tested, modified (if needed) and calibrated. It is then readied for system integration.
6.5	per 900-PG-8700.1.2 and 902-PG-8730.3.1	Concurrent with 6.4, the supporting data system is being conceptualized developed and reviewed. The test software is then being validated and the system documented. Following a final review, the data system is released/activated and is ready for systems integration.
6.6	per 900-PG-8700.1.1 and 900-PG-8700.1.2 and 902-PG-8730.3.1	Instrument and data systems are being integrated with the total system. System tests are performed. Upon successful completion, the system is ready for launch and/or other operations start.
6.7	per 900-PG-8072.1.1	The instrument is launched and/or the system made operational. Data is downloaded from the instrument.
6.8	per 900-PG-8072.1.1	Receive data and edit to standard. Ingest and hold. Test data for corruption and other nonconformance. Ready acceptable data for cataloging and distribution. Incoming nonconforming data is deleted or returned to the data provider. Outgoing data is dispositioned, i.e. corrected, tested and forwarded, or discarded.
6.9	per 900-PG-8072.1.1	Acceptable data is cataloged and filed into archives. Archive database is backed up.
6.10	per 900-PG-8072.1.1	If appropriate, additional processing may take place. This could include establishing user interfaces, linkages and/or cross-cataloging.
6.11	per 900-PG-8072.1.1	The data is distributed to the science community and/or general public. User feedback is received and acted on.
6.12	per 900-PG-8072.1.1	Per the original proposal and funding agreement, data is distributed to the science team/community for its research.
6.13	per 900-PG-8072.1.1	Data is analyzed empirically vs. theory. Research is continued until concluded and a manuscript drafted for review and publication.
6.14	per 900-PG-8072.1.1	A series of reviews take place, most often including peers, management and the journal editor.
6.15	per 900-PG-8072.1.1	The approved manuscript is published as a new scientific document.

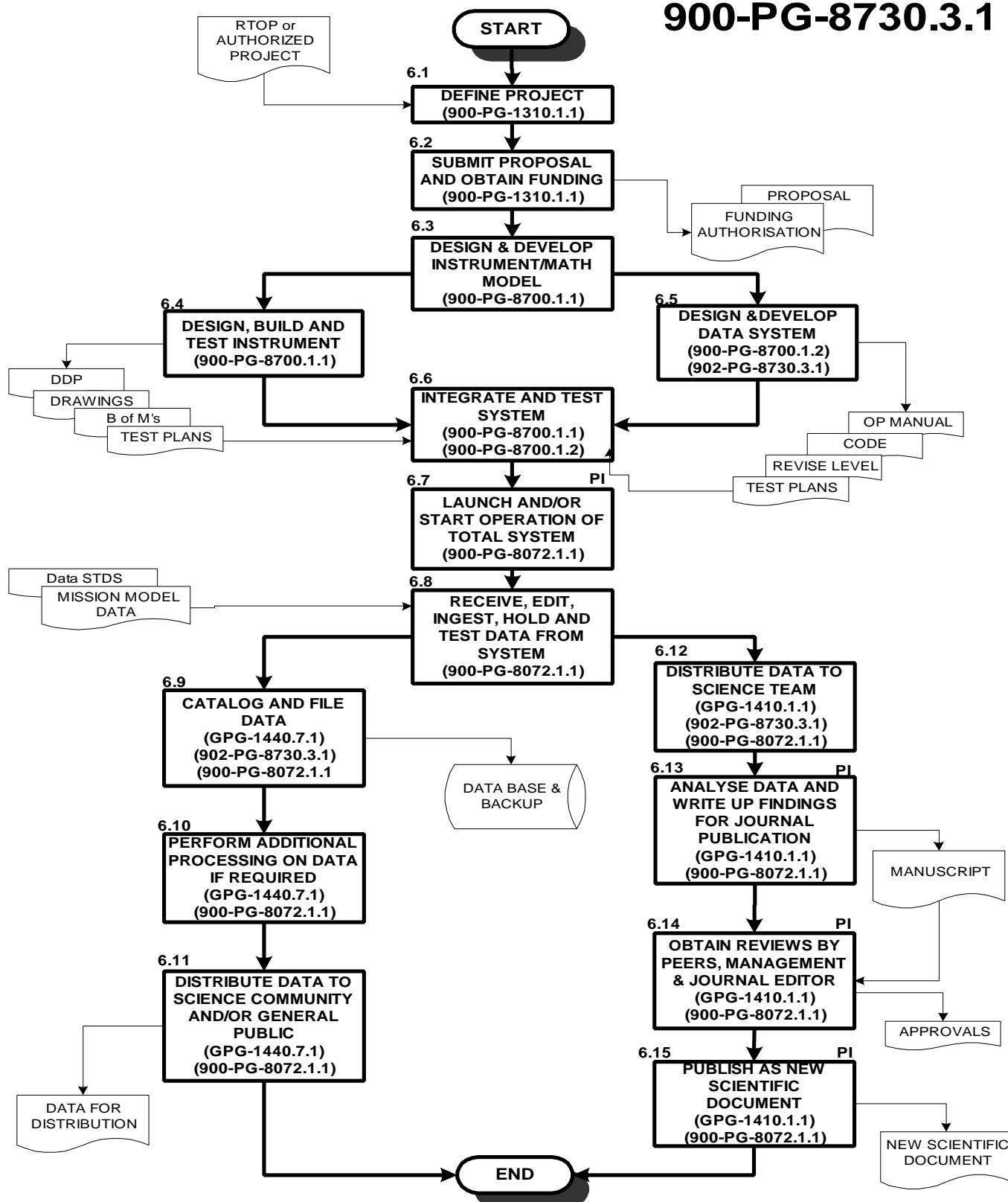
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P7. RECORDS

As this PG is an overview procedure that only makes direct references to other procedures, the quality records used or generated will be as described in these referenced procedures.

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CHANGE HISTORY LOG

Revision	Effective Date	Description of Changes
Baseline	04/21/99	Original PG.